

What is claimed is:

1. A re-usable carrier structure for carrying an article, comprising
a carrier base having at least a portion thereof transparent to electromagnetic radiation,
a surface of said carrier base having different properties from a surface of said article, and
said carrier base being stable to resist deformation by heat at temperatures less than or equal to about 80°C; and
an adhesive layer disposed on said carrier base,
said adhesive layer being cross-linkable by electromagnetic radiation, heat, or both heat and electromagnetic radiation, and
said adhesive layer having a different release profile from said surface of said article than from said surface of said carrier base.
2. The re-usable carrier structure of claim 1, wherein the carrier base is one of a waffle pack, a tray, a JEDEC tray, a tape-and-reel, and a tape.
3. The re-usable carrier structure of claim 1, wherein the electromagnetic radiation is applied to said adhesive layer through the portion of said carrier base that is transparent to electromagnetic radiation.
4. The re-usable carrier structure of claim 1, wherein the adhesive layer is cross-linkable by heat, UV radiation, or both heat and UV radiation.
5. The re-usable carrier structure of claim 1, wherein the adhesive layer loses the majority of its peel strength after cross-linking.
6. The re-usable carrier structure of claim 1, wherein the adhesive layer loses about 70% of its peel strength after cross-linking.

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7. The re-usable carrier structure of claim 1, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 150°C.
8. The re-usable carrier structure of claim 1, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 300°C.
9. The re-usable carrier structure of claim 1,
further comprising a carrier frame,
wherein said carrier base is releasably supported by the carrier frame.
10. A re-usable carrier structure comprising:
a carrier base, said carrier base having at least a portion thereof
transparent to electromagnetic radiation, and
said carrier base being stable to resist deformation by heat at
temperatures less than or equal to about 80°C; and
an adhesive laminate disposed on a surface of said carrier base, said
adhesive laminate comprising:
an adhesive base;
a first adhesive layer disposed on a first surface of said adhesive base
for removably connecting said carrier base and said adhesive base; and
a second adhesive layer disposed on a second surface of said adhesive
base,
said second adhesive layer being cross-linkable by electromagnetic
radiation, heat, or both heat and electromagnetic radiation.
11. The re-usable carrier structure of claim 10, wherein the carrier base is one of a
waffle pack, a tray, a JEDEC tray, a tape-and-reel, and a tape.
12. The re-usable carrier structure of claim 10, wherein the electromagnetic
radiation is applied to said adhesive layer through the portion of said carrier
base that is transparent to electromagnetic radiation.

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13. The re-usable carrier structure of claim 10, wherein the second adhesive layer is cross-linkable by heat, UV radiation, or both heat and UV radiation.
14. The re-usable carrier structure of claim 1, wherein the second adhesive layer loses the majority of its peel strength after cross-linking.
15. The re-usable carrier structure of claim 10, wherein the second adhesive layer loses about 70% of its peel strength after cross-linking.
16. The re-usable carrier structure of claim 10, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 150°C.
17. The re-usable carrier structure of claim 10, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 300°C.
18. The re-usable carrier structure of claim 10, further comprising an adhesive base disposed between said first and said second adhesive layers, said adhesive base being stable to degradation at temperatures less than or equal to about 80°C.
19. The re-usable carrier structure of claim 10,
further comprising a carrier frame,
wherein said carrier base is releasably supported by the carrier frame.
20. A re-usable carrier structure comprising
a carrier base having at least a portion thereof transparent to
electromagnetic radiation, and
said carrier base being stable to resist deformation by heat at
temperatures less than or equal to about 80°C;
a first adhesive layer removably disposed on a surface of said carrier
base; and
a second adhesive layer disposed on said first adhesive layer, and

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said second adhesive layer being cross-linkable by electromagnetic radiation, heat, or both heat and electromagnetic radiation.

21. The re-usable carrier structure of claim 20, wherein the carrier base is one of a waffle pack, a tray, a JEDEC tray, a tape-and-reel, and a tape.
22. The re-usable carrier structure of claim 20, wherein the electromagnetic radiation is applied to said adhesive layer through the portion of said carrier base that is transparent to electromagnetic radiation.
23. The re-usable carrier structure of claim 20, wherein the second adhesive layer is cross-linkable by heat, UV radiation, or both heat and UV radiation.
24. The re-usable carrier structure of claim 20, wherein the second adhesive layer loses the majority of its peel strength after cross-linking.
25. The re-usable carrier structure of claim 20, wherein the second adhesive layer loses about 70% of its peel strength after cross-linking.
26. The re-usable carrier structure of claim 20, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 150°C.
27. The re-usable carrier structure of claim 20, wherein said carrier base is stable to resist deformation by heat at temperatures less than or equal to about 300°C.
28. The re-usable carrier structure of claim 20, further comprising an adhesive liner disposed between said first and said second adhesive layers, said adhesive liner being stable to thermal degradation at temperatures less than or equal to about 80°C.

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29. The re-usable carrier structure of claim 20 further comprising:
a carrier frame,
wherein said carrier base is releasably supported by the carrier frame.
30. A re-usable carrier structure for carrying one or more objects, said re-usable carrier comprising:
a base layer,
wherein at least a portion of said base layer is transparent to electromagnetic radiation,
wherein said base layer is formed of a material that is stable at temperatures less than about 80°C; and
an adhesive layer disposed on said base layer
wherein said adhesive layer becomes cross-linked upon exposure to electromagnetic radiation thereby to exhibit a reduction of adhesiveness,
wherein the reduction of adhesiveness to the one or more objects exceeds the reduction of adhesiveness to said base layer.
31. The re-usable carrier of claim 30 further comprising:
a carrier structure,
wherein said base layer is releasably supported by said carrier structure.
32. The re-usable carrier of claim 31, wherein said carrier structure is formed of a material that is stable at temperatures less than about 80°C.
33. The re-usable carrier of claim 30,
wherein said adhesive layer comprises first and second adhesive layers exhibiting different adhesiveness,
wherein said first adhesive layer is disposed on said base layer, and
wherein said second adhesive layer is disposed on said first adhesive layer and exhibits greater reduction of adhesiveness than said first adhesive layer.

34. The re-usable carrier of claim 33, further comprising a liner layer disposed between said first and second adhesive layers.

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